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ABSTRACT

Telephone interviews with 118 adults in the Gainesville, Florida, area were used to determine the relationships between the number and diversity of social problems mentioned by cable television subscribers versus nonsubscribers, socioeconomic status (SES), and media use. Media use was found to be associated with the type and number of problems mentioned as local or national issues. Cable television subscribers were found less diverse in their conceptions of national problems, even when comparing at varying SES levels. Local television news viewing and regular reading of a news magazine were the only media measured that made a difference in diversity: more issues were identified when these media were not used. Although greater media use was hypothesized as enhancing the diversity of identified social problems, relationships were often found to be opposite those predicted. Most of the diversity of identified issues resulted from less contact with the media. Nonsubscribers appeared to be less heavy media users, while low SES individuals seemed to be more diverse in their conceptions of local problems. (RL)

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T & M Division

Cable Television Subscription and Conceptions of Social Problems

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CABLE TELEVISION SUBSCRIPTION
AND CONCEPTIONS OF SOCIAL PROBLEMS

Current media technology has been seen as the beginnings of the "Wired City" and, even further, the "Wired Nation." Gerhard J. Hanneman has written that the development of what he calls the "new media" is close to the "final chapter in the development of a communications-dominant environment...(1975; 306)."

How social behavior will be affected by an environment characterized by rapid interpersonal and mass communication is a matter of controversy. Canter (1977) sees an increasing international homogeneity as the result of centralization of decision-making and rapid communications.

However, Webber (1973) notes that the long-range cons quences of the communications revolution are yet to be uncovered, and a cultural pluralism is the only clear effect at this time. Webber feels that an erosion of localism is leading not to a homogeneous society but instead to a nation of minorities.

While arguing whether a "mass audience" ever existed, Grunig (1976) points to media effects research as evidence that society today is increasingly fragmented and that the "mass media" are increasingly specialized to accommodate the specific interests of small groups.

A major goal of the news industry is to clarify issues and problems in society. If the media attain that goal, the media audience should be concerned with issues stressed in the news. This has been the focus of agenda-setting research, which studies cognitions developed through media use rather than adopting the traditional media effects research stance of directional attitude change (Becker, McCombs, and McLeod, 1975).

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If the media audience becomes concerned with issues stressed in the news, two possible consequences are: 1) members of the media audience will all hold similar opinions on issues stressed in the news (because the entire audience is presented with essentially the same information) or, 2) audience members should hold a diversity of opinion on these issues (because "unbiased" news presentation presents more than one side of an issue).

Despite much speculation over media "effects", this very basic issue in communications research has seldom been investigated. Chaffee and Wilson (1976) studied the diversity of salient social problems in media-rich and media-poor communities and found evidence that the more media-rich the community, the greater the diversity of problems salient within the community.

Jeffres (1976) found that socioeconomic factors influenced the way people used cable television. Persons of high socioeconomic status (SES) began to devote more of their news viewing time to national news broadcasts when they subscribed to cable, while low SES persons began to watch less national and more local news.

In further analysis, Jeffres (1978) attributed these behavioral changes to "interest maximization" - the tendency for an individual to increase viewing of preferred programming and decrease viewing of programs in non-preferred categories after subscribing to cable.

Interest maximization may be related to uses and gratifications obtained from the media. Palmgreen and Rayburn II (1979) found support for a discrepancy approach to uses and gratifications research. Differences between gratifications sought and

gratifications obtained from the media were used to discriminate between viewers and nonviewers of public TV. Gant.'s (1978) study of how uses and gratifications affect recall of TV news suggested that media effects may be a function of the effects' consistency with the dominant set of gratifications sought. Recreation/diversion motivations appear to interfere with the acquisition of information from a television newscast.

If use of media does influence the diversity of conceptions of social problems, then one could expect the differential news viewing patterns described by Jeffres to influence diversity for high and low SES cable TV subscribers. Additionally, one would expect diversity levels to be different for cable TV subscribers and nonsubscribers as well, because a different set of gratifications should be operating (effecting a differential acquisition of knowledge which, in turn, affects a differential diversity level).

The present study investigated the diversity levels of high and low SES subscribers and nonsubscribers to determine whether differential media use and viewing habits might be associated with different levels of diversity of salient conceptions of social problems.

RESPONSE DIVERSITY

Of the various measures which could be used to research diversity of salient social problems, most fitting would be a measure of diversity which would be sensitive to the distribution of nominal variables.

Such a measure would enable the researcher to examine both the level of diversity within each group of responses and compare the distributions of the variable for the two groups.

Schramm (1955) suggested that Shannon's H statistic be used as a measure of diversity in mass communications research. Shannon's H was developed through information theory by Claude Shannon in 1948 (Schramm, 1955).

Chaffee and Wilson (1976) have applied Shannon's H so that it measures the diversity of problems mentioned by respondents in a survey. Chaffee and Wilson studied response diversity in media-rich and media-poor communities with promising results. Though their study considered only newspapers to define the media-richness of a community, Chaffee and Wilson note the potential importance of comparing different types of media systems in terms of the diversity of responses from media audience members.

However, a problem arises when attempting to use information theory principles for mass communication analysis. Information theory defines and measures diversity within a system. Although this type of research examines the process at the community level (analyzes data as if the entire communication process were one large system), the results become almost uninterpretable. Even though the relative diversity of two groups can be compared, those diversity levels make little sense outside the context of that particular project.

Agresti and Agresti (1978) presented Simpson's D and Lieberson's D_b as measures of diversity of populations which allow more generalizable and interpretable results.

Of primary importance is a measure of diversity within groups which would enable the researcher to define the parameters of the diversity of the population and which would allow comparison with other populations. Simpson's D provides this measure because it gives the probability that two individuals selected at random from the population would be in different categories.

Simpson's D is defined as $D = 1 - \sum p_i^2$, where p_i is the proportion of observations in the i^{th} category ($i = 1, 2, 3, \ldots k$). As a descriptive statistic, D has the following properties: first, the minimum possible value of D is 0, which occurs if and only if some $p = 1$, and all other probabilities are 0. That is, the least diverse population (where all members are classifies into one category) obtains a value of 0; second, for a fixed number of categories, k, the maximum possible value of the diversity index is $D = 1 - (1/k)$, which occurs if and only if $p_1 = p_2 = p_3 = \ldots = p_k = (1/k)$. That is, for a nominal classification with k levels, the most diverse population is one that is evenly spread over the k categories (Agresti and Agresti, 1978).

A standardized version of D can be obtained by the formula $I = (k/k-1)D$, which obtains a maximum value of 1 when all categories are spread evenly throughout the distribution. Standardizing in this way enables comparison of two groups with different numbers of categories. However, if categories are the same for the groups being compared, there is no need to standardize, since I is the same constant multiple of D.

While the above properties are shared by Shannon's H statistic, Simpson's D has an added advantage: the variance of D can be calculated by the formula $\sigma^2 = 4\left[\Sigma p_i^3 - (\Sigma p_i^2)^2\right]$.

Thus a $100(1 - \alpha)\%$ confidence interval for D can be obtained, or one can test the hypothesis of $D = D_0$ by the test statistic $z = \sqrt{n}(\hat{D} - D_0)/\hat{\sigma}$.

Applying Simpson's D to the research at hand, the two groups (cable subscribers and nonsubscribers) can be compared by the diversity within each group's responses. If the media are effective transmitters of information regarding issues and problems in society, persons exposed to more media would be expected to have a greater knowledge of issues within the community, and a sample of responses from each group whould reflect the diversity of opinion within each group.

However, if the media in fact shape public opinion into a certain number of categories (reflecting issues stressed in the news) we may see media users consistently naming problems in the same broad categories. In this respect, media use could have an effect on the types of problems mentioned, but diversity levels might be similar for the two groups. For example, if a sample of media users named problems in five categories and non-media users named problems in five completely different categories, but the proportions of responses were similar, Simpson's D would not detect differences, since the diversity within each group would be similar.

Agresti and Agresti (1978) present Lieberson's D_b as a measure of diversity which compares diversity between groups. Lieberson's D_b gives the probability that two individuals, selected at random from the two groups, are classified differently on the variable of interest.

"Between-groups" diversity can be used to see whether the ranges of the two groups are significantly different. The formula for this measurement is $D_b = 1 - p_i q_i$, where p_i is the proportion of responses for the first group (i = 1 through k) and q_i is the proportion of responses for the second group (i = 1 through k).

A confidence interval for the diversity differences between two groups can be computed using the formula

$$D_b = D_b \pm z\sqrt{\frac{\sum p_i q_i}{n_1} + \frac{\sum q_i p_i}{n_2} - \frac{(n_1 + n_2)(1 - D_b)^2}{n_1 n_2}} .$$

In this study, "within-groups" diversity (Simpson's D) is used to compare the diversity within each group, and "between-groups" diversity (Lieberson's D_b) is used as a check to see how well-matched the two groups are in the range of issues mentioned. The D values become the probabilities that two problems selected at random from a group's responses are the same problem category, and the D_b values are the probabilities that two problems (one selected randomly from each of the two groups being compared) are in the same problem category.

METHOD

A telephone survey of persons living in Gainesville, Florida, was conducted. A computer program generated four-digit telephone numbers (with assigned Gainesville prefixes) at random to develop a sampling frame.

Respondents were asked to name the most important local and national issues or problems. Data were also collected on demographic and media use variables.

All answers to the "problems" questions were coded as received, in the order in which they were given. This resulted in 57 specific categories of response. These categories were recoded into 24 categories to match the Federal Communication Commission's "Problem Checklist" with slight modification (Corporation for Public Broadcasting, 1976).

From these responses, four variables were constructed: Local 1 (the first local problem mentioned), Local Total (all local problems mentioned), National 1 (the first national problem mentioned), and National Total (all national problems mentioned).

Duncan-Reiss SES scores (Reiss, et. al., 1961) were assigned to each respondent on the basis of occupation. These were split at the median to form two groups: high and low SES. If occupation was not given, household income was used as a basis in determining if the respondent were high or low SES (based on income ranges and median incomes for the two groups). In the case of no occupation or income being given, educational level was used to classify the respondent (in the same manner as with income).

Persons who answered "student" as their occupation and persons younger than 18 were eliminated from the study. This resulted in 118 usable returns for analysis.

Variables were examined to determine significant relationships between the number and diversity of problems mentioned by subscribers and nonsubscribers and demographic or media use factors.

The following hypotheses were advanced related to media use and the diversity of problems mentioned:

Because of greater interest in and use of media in general, cable TV subscribers will watch, read, and listen to more news reports than nonsubscribers (Agostino, 1978). Diversity is hypothesized to be affected by media use.

H1: Local and national problems cited by cable subscribers will be more diverse than those cited by nonsubscribers.

Interest maximization will be present and low SES cable subscribers will watch more local news than will high SES cable subscribers. High SES subscribers will watch more national news than low SES subscribers. These tendencies will produce noticeable effects on diversity levels.

H2: Local problems cited by low SES cable subscribers will have greater diversity than those cited by high SES subscribers.

H3: National problems mentioned by high SES subscribers will have greater diversity than will those of low SES subscribers.

Because low SES subscribers are assumed to be most interested in local affairs (as a group they expose themselves to more media than nonsubscribers and more local news than high SES subscribers), they will be most affected by media use in the diversity of their responses.

H4: Low SES subscribers will have greater diversity in their conceptions of local problems than will nonsubscribers of high or low SES.

Diversity analysis was conducted using one-tailed tests of statistical significance (alpha = .05, z = 1.65)

RESULTS

Media Use

Significant positive relationships were found between cable subscription and use of local newspaper, out-of-town newspaper, and watching a local TV newscast (see Appendix A). A significant negative relationship was found between cable subscription and listening to the radio. Regular reading of a news magazine was not found to be significantly related to cable subscription.

Data thus generally tended to support earlier research by Jeffres (1976) and Agostino (1978) which showed that cable subscribers generally use more media than nonsubscribers. However, the negative relationship between cable subscription and radio was unexpected.

Predictions of Number of Problems

Because the diversity measures employed have been untried in previous mass communication research, data were examined for relationships between measured variables and the number of problems mentioned. Data were examined on three levels: the number of local problems mentioned, the number of national problems mentioned, and the total number of problems mentioned.

Local problems

Leroy and Ungurait's (1975) study on variables affecting the number of problems mentioned in an ascertainment survey found only education had a significant correlation. The present study found significant correlations between the number of local problems mentioned and local TV news viewing (Kendall's Tau-B = .09, p = .01), local newspaper readership (Kendall's Tau-B = .16,

p = .01), length of residence (Kendall's Tau-B = .14, p = .02), and length on cable (Kendall's Tau-B = .16, p = .02). No relationship was found for education and the number of problems mentioned.

national problems

The number of national problems mentioned was not associated with any media use measured, including cable subscription. Instead, income and SES (two highly intercorrelated measures themselves) were the only characteristics which showed correlations with the number of national problems mentioned (income: Kendall's Tau-B = .18, p = .01; SES: Kendall's Tau-B = .18, p = .01).

total problems

Combining national and local problems into one variable showed different relationships than either problem category had by itself.

The highest correlation with total problems mentioned was with local newspaper use (Kendall's Tau-B = .15, p = .02). This was followed by length of residence (Kendall's Tau-B = .13, p = .01). Use of a news magazine was found to have a slight relationship with total problems mentioned (Kendall's Tau-B = .12, p = .02).

SES and number of problems

T-tests showed low SES individuals mentioned an average of 1.16 national problems, while high SES individuals mentioned an average of 1.45 problems (t = 1.92, p = .02). No significant difference was found for local problems or total problems.

Media Use and Diversity of Problems

Before testing Hypothesis 1, which examines diversity for different SES levels, diversity analysis was performed on the overall responses of cable subscribers and nonsubscribers. Diversity levels were found to be the same for subscribers and nonsubscribers for local problems (both the first problem mentioned and total local problems mentioned), but for national problems, significant differences were found (See Table 1)

Table 1 goes about here

Whereas the "media-rich" cable environment was expected to produce more diverse responses, the opposite was found. A diversity level of .73 (meaning a .73 probability that two responses would be in different categories) was found for subscribers, but D equalled .90 for nonsubscribers.

To further investigate this difference between subscribers and nonsubscribers, "between-groups" diversity analysis was performed. If the differences were indeed due to an agenda-setting function of the media (thus an agenda-holding effect within the media audience), we would expect that the differences between groups would decrease when respondents were given more chances to name as many problems as possible. That is, it would be expected that, if more salient (media-set) topics were picked as the first problem named, then media users would be more apt to pick different topics when asked for more. Non-media users would continue in the same pattern as before (presumably either a "random" listing of problems within the community or a "profile" of the importance of

problems within the community), and so differences would be minimized. Table 2 presents an analysis of the "between-groups" diversity levels for subscribers and nonsubscribers.

Table 2 goes about here

Table 2 gives the minimum and maximum levels (a confidence interval) for the D_b values. For example, for Local 1 (the first local problem mentioned), a D_b of .94 indicates that there is a 94% probability that, if one were to choose two "problems" at random from those given by respondents (one from subscribers and one from nonsubscribers), they would be in different categories. Since the confidence intervals overlap, the D_b values indicate that we cannot be certain (at the .05 level) that there are different degrees of diversity between any of the four levels examined.

The D_b coefficients can be compared to the values given in Table 1 for Local 1. In that analysis, diversity within the subscribers' problems was .90. This indicates that, if one were to pick two responses at random from those given by subscribers (the first local problem given), there would be a 90% probability that the problems would be different.

The same probability was found for nonsubscribers in that instance. If the two distributions were identical, the "between-groups" diversity would be the same as the "within-groups" diversity.

Figures 1 and 2 illustrate these concepts. Figure 1 is a histogram of Local 1 (the first local problem mentioned). As illustrated, the diversity "within the groups" appears to be about the same. There are no extreme proportions. In fact, for both subscribers and nonsubscribers, the distributions look almost rectangular.

Figures 1 and 2 about here

However, if one examines the distributions by comparing which problems are mentioned, differences between them are apparent. Subscribers' responses are clustered in different areas than are nonsubscribers'. The groups are naming different problems, and the D_b of .94 is a mathematical description of that difference.

Figure 2 presents the data from the first national problem mentioned. A quick glance shows quite a striking difference between these two distributions. Subscribers' responses have one very tall bar (with over 50% of responses falling into that category), and most of the other distributions are nearly equal in height. Nonsubscribers are more evenly distributed.

However, though they are naming problems in different proportions, subscribers and nonsubscribers appear to be naming many of the same problems. Even though more than 50% of subscribers' responses are centered in one problem area, the remaining responses are scattered fairly evenly over many of the same problems as nonsubscribers.

Thus, we would expect "within-groups" diversity levels to be greater for nonsubscribers than for subscribers (since non-subscribers are more evenly distributed). Table 1 confirms this (D = .73 for subscribers, D = .90 for nonsubscribers).

We would also expect the "between-groups" diversity level to be less than it was for Local 1, since there appears to be more agreement on the types of problems mentioned. Table 2 shows the computed D_b values follow this pattern, but the confidence intervals overlap so that this difference cannot be considered statistically significant.

examination by SES level

Hypothesis 1 predicted greater diversity for subscribers while controlling for SES. In this analysis, the SES groupings showed significant differences in diversity between subscribers and nonsubscribers only for National 1, the first national problem mentioned. However, this difference was in the opposite direction to that hypothesized (see Table 3). Low SES subscribers were less diverse than were low SES nonsubscribers in their first response to the national problem question.

For high SES, nonsubscribers again had greater diversity for National 1, but, as hypothesized, subscribers had greater diversity for Local 1 and Local Total.

Tables 3 and 4 about here

Diversity and Media Use

Hypotheses 2 and 3 deal with expectations of diversity levels within SES categories. Hypothesis 2 predicts low SES subscribers will have greater diversity than will high SES subscribers, controlling for media use. Hypothesis 3 predicts high SES subscribers will have greater diversity for national problems.

Small sample sizes made it impossible to control for demographic variables, so media use variables were the only variables which could be even partially controlled. Complete tables on the media use tests are in Appendix B.

The only significant difference found between low SES and high SES subscribers, examining data by levels of media use, was in local television news viewing. However, this was in the opposite direction to that hypothesized.

For those who had not seen a local television news broadcast on the day before, high SES subscribers were more diverse in their conceptions of local problems (Local 1), but low SES subscribers were more diverse for national problems (both National 1 and National Total). However, the difference found in Local 1 only approaches significance.($p = .06$).

No differences were found between SES levels for those who had seen one or more local newscasts on the day before being surveyed.

This is especially interesting because television news viewing was positively associated with the number of local problems mentioned by respondents. These results tend to indicate that

local TV news viewing is associated with naming more problems, but most of those problems tend to be similar for everyone who watches the news. Additional analysis was performed to check diversity levels for those who had used certain local media and those who had not used them (see Appendix B).

In this analysis, differences were found between those who had not seen a local newscast and those who had seen one or more, and between those who do not regularly read a news magazine and those who do.

For TV news, the difference was only in the total local problems mentioned by respondents. In that instance, greater diversity was found for those who had not seen a local newscast on the day before.

For news magazines, the difference was in Local 1 (the first local problem mentioned). In that instance, greater diversity was found for those who did not read a news magazine regularly (compared to those who did).

It would appear that these results indicate (tentatively) that television news viewing and reading news magazines are major sources of knowledge about current issues, and so are responsible to an extent for certain aspects of audience agenda-holding.

Cable Subscription and SES; Interaction and Diversity

Hypothesis 4 predicted greater diversity for problems mentioned by low SES subscribers than for nonsubscribers in general. In fact, the opposite was found, but the differences were significant for National 1 only (see Table 5).

Table 5 about here

Null hypothesis 4, which was based on the hypothesis of greater diversity associated with greater media use, cannot be rejected. This underscores the general finding that media use is not necessarily associated with more diversity, and, in fact, is often associated with less diversity in the present study.

SUMMARY

In summary, the present study found evidence that media use is associated with the type and number of problems mentioned as being issues locally or nationally.

Cable TV subscribers were found less diverse in their conceptions of national problems (both the first problem they named and the total problems they named), even when comparing at varying SES levels. Differences in diversity of responses were observed between high SES subscribers and high SES non-subscribers in their conception of local problems. High SES subscribers were found more diverse than high SES nonsubscribers both in the first local problem mentioned and in total local problems mentioned. High SES nonsubscribers were found more diverse than high SES subscribers in the first national problem mentioned.

The low SES group of subscribers was more diverse in its conceptions of national problems than the high SES group of

subscribers. Among nonsubscribers, the low SES group was more diverse in its conceptions of local problems. Among the high SES portion of the sample, subscribers were more diverse than nonsubscribers in their conceptions of local problems.

Local TV news viewing and regular reading of a news magazine were the only media measured which made a difference in diversity. Those who had not seen a local TV newscast or read a news magazine regularly were more diverse than those who did use those media.

Generally, although greater media use was hypothesized to enhance diversity of conceptions of salient social problems, relationships were often found to be opposite those predicted. In nearly all instances of differences found in diversity in the present study, less contact with the media is associated with greater diversity of conceptions of social problems.

The findings are particularly interesting in light of Jeffres' "Interest Maximization." If, as Jeffres hypothesizes, high SES subscribers are more interested in national affairs, and so watch more national news when they subscribe to cable, those national newscasts may be "setting" their opinions somewhat. The present study found them less diverse in their opinions of national problems.

Nonsubscribers appear to be less heavy media users, and

Nonsubscribers appear to be less heavy media users, and low SES individuals were found more diverse in their conceptions of local problems. This might be due to the supposed increased exposure to media among the higher SES groups in the "knowledge-gap hypothesis."

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Appendix A

Media Use and Cable Subscription

Cable Subscription by Local Newspaper

Group	No Newspaper	1 Newspaper	2 or More Newspapers	(N)
Subscribers	34%	43%	22%	(90)
Nonsubscribers	67%	22%	11%	(27)
Total	42%	38%	20%	(117)

Kendall's Tau-B = .25 Probability = .001

Cable Subscription by Other Newspaper

Group	No Newspaper	1 Newspaper	2 or More Newspapers	(N)
Subscribers	78%	20%	2%	(90)
Nonsubscribers	96%	4%	0%	(27)
Total	82%	66%	2%	(118)

Kendall's Tau-B = .20 Probability = .01

Cable Subscription by TV Newscast

Group	No Newscast	1 Newscast	2 or More Nescasts	(N)
Subscribers	49%	41%	10%	(90)
Nonsubscribers	63%	33%	4%	(27)
Total	52%	40%	9%	(118)

Kendall's Tau-B = .13 Probability = .04

Cable Subscription by Radio

Group	Hours 0	1	2	3	4	5	6 or More	(N)
Subscribers	30%	40%	16%	8%	4%	2%	0%	(83)
Nonsubscribers	12%	48%	4%	4%	20%	4%	8%	(25)
Total	26%	42%	13%	7%	7%	3%	2%	(108)

Kendall's Tau-B = -.19 Probability = .04

Cable Subscription by News Magazine

Group	None	1 Magazine	2 Magazines	3 or More Magazines	(N)
Subscribers	59%	31%	9%	1%	(90)
Nonsubscribers	67%	22%	11%	0%	(27)
Total	61%	29%	9%	1%	(118)

Kendall's Tau-B = .05 Probability = .13

Appendix B

Media Use and Diversity of Problems

Local TV News

Problem Variable+	D_0*	D_1*	test z-value $D_0 = D_1$	probability
Local 1	.91	.88	.829	.21
Local Total	.93	.87	2.204	.01
National 1	.62	.76	1.220	.11
National Total	.82	.86	.654	.26

*subscript 0 indicates group who did not use the medium being tested subscript 1 indicates group who did use the medium being tested.
+Local 1 is first local problem mentioned. Local Total is all local problems mentioned. National 1 is first national problem mentioned National total is all National problems given.

Local Newspaper

Problem Variable	D_0	D_1	z-value	probability
Local 1	.87	.90	.816	.21
Local Total	.90	.92	.883	.19
National 1	.64	.69	.374	.38
National Total	.82	.83	.088	.46

Local Radio

Problem Variable	D_0	D_1	z-value	probability
Local 1	.87	.90	.816	.21
Local Total	.90	.92	.883	.19
National 1	.64	.69	.374	.38
National Total	.82	.83	.088	.46

Out-of-Town Newspaper

Problem Variable	D_0	D_1	z-value	probability
Local 1	.93	.88	-.860	.19
Local Total	.91	.89	-.560	.29
National 1	.70	.64	-.391	.35
National Total	.84	.81	-.403	.34

News Magazine

Problem Variable	D_0	D_1	z-value	probability
Local 1	.89	.79	-1.770	.04
Local Total	.87	.86	- .074	.47
National 1	.64	.77	1.044	.15
National Total	.82	.88	1.290	.10

DIVERSITY TESTS: SES LEVELS
CONTROLLING FOR MEDIA USE

Local TV News - No Newscast

Problem Variable	D_1*	D_h*	z-value+	probability
Local 1	.79	.90	-1.581	.06
Local Total	.91	.92	- .087	.47
National 1	.86	.55	-2.853	.002
National Total	.88	.78	-1.671	.05

*D_1 refers to diversity level for subscribers of low SES. D_h refers to subscribers of high SES.
+z-value refers to value obtained when testing $D_1 = D_h$.

Local TV News - One or More Newscasts

Problem Variable	D_l	D_h	z-value	probability
Local 1	.89	.83	1.331	.09
Local Total	.89	.88	.352	.36
National 1	.59	.73	.894	.19
National Total	.76	.84	.872	.19

Local Newspaper - No Paper

Problem Variable	D_l	D_h	z-value	probability
Local 1	.85	.73	1.006	.16
Local Total	.91	.88	1.856	.03
National 1	.78	.49	-1.682	.05
National Total	.84	.80	.453	.33

Local Newspaper - 1 or More Newspapers

Problem Variable	D_l	D_h	z-value	probability
Local 1	.85	.88	-.569	.29
Local Total	.92	.91	.409	.46
Nationa 1	.79	.68	-1.097	.16
National Total	.84	.79	-.703	.24

Local Radio - No Listening

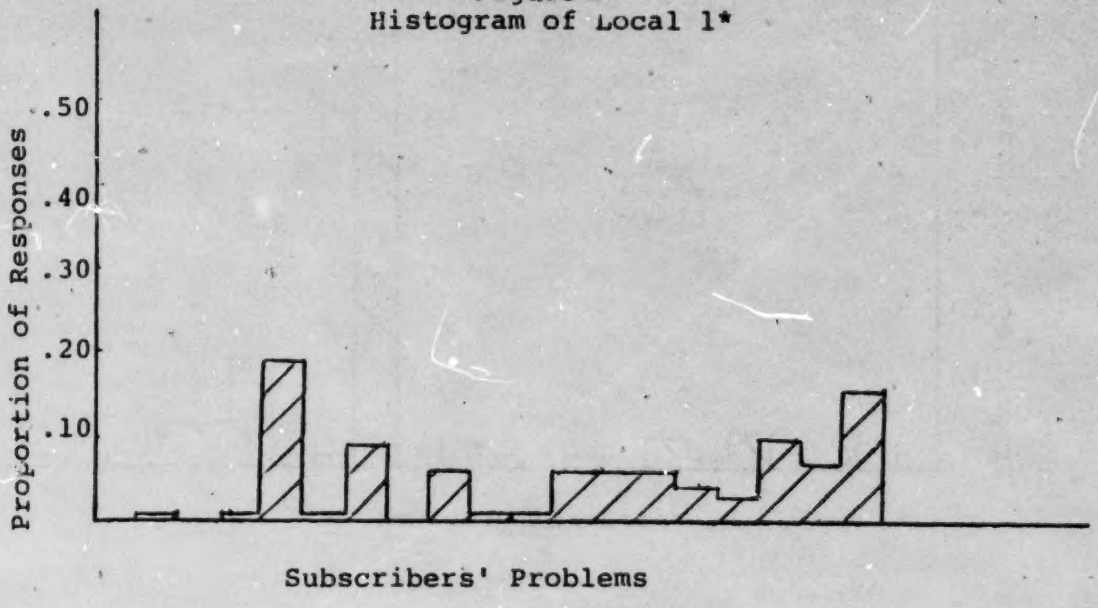
Problem Variable	D_l	D_h	z-value	probability
Local 1	.81	.81	.093	.46
Local Total	.85	.91	-1.081	.14
National 1	.72	.59	.102	.46
National Total	.77	.83	-.590	.27

Local Radio - 1 or More Hours

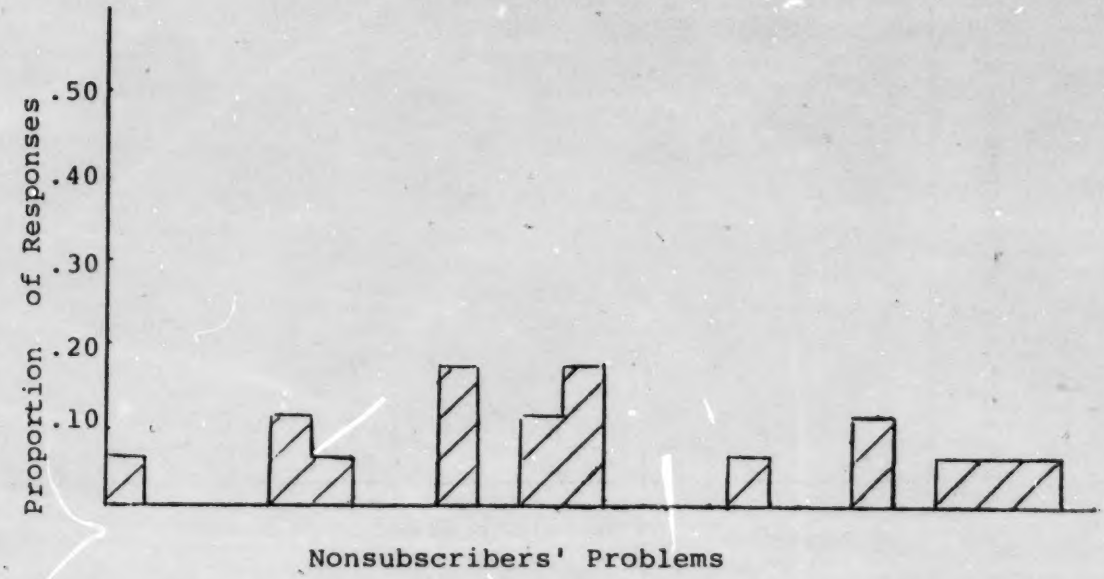
Problem Variable	D_l	D_h	z-value	probability
Local 1	.81	.88	1.330	.09
Local Total	.91	.91	.052	.48
National 1	.59	.71	.970	.17
National Total	.83	.80	-.382	.35

- Sample sizes were too small to test use of news magazine -

Figure 1:
Histogram of Local 1*



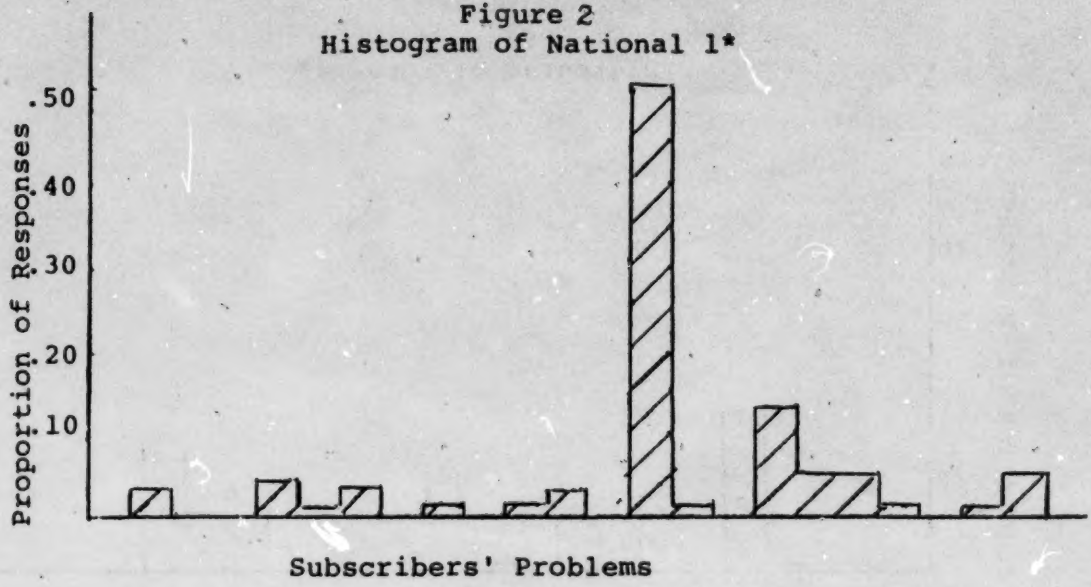
Subscribers' Problems

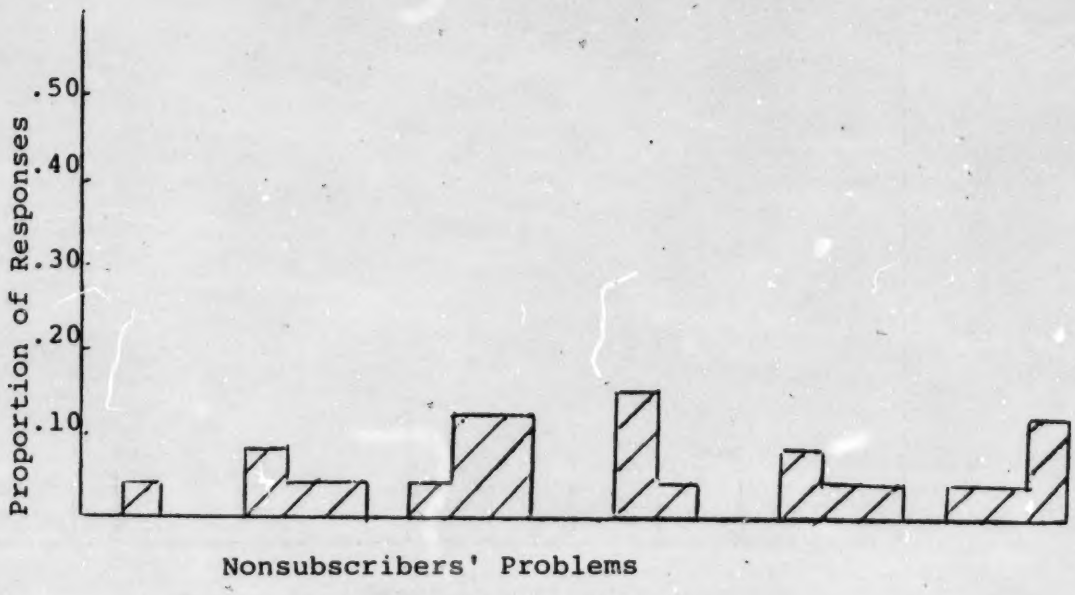


Nonsubscribers' Problems

*First Local Problem mentioned

Figure 2
Histogram of National 1*





*First National Problem mentioned

Table 1

Overall Diversity of Cable TV Subscribers and Nonsubscribers

Problem Variable	D_s^+	D_n^+	z-value	Probability
Local 1*	.90	.90	.069	.47
Local Total*	.92	.92	.310	.38
National 1*	.73	.90	3.294	.001
National Total*	.91	.94	2.553	.01

*Local 1 and National 1 indicate the first problem mentioned in those areas. Local Total and National Total indicate all of the responses an individual made in those areas.

Table 2

Overall "Between-Groups" Diversity
For Subscribers and Nonsubscribers
(.05 Confidence Level)

Problem Variable	D_b	D_b (maximum)*	D_b (minimum)*
Local 1	.94	.97	.90
Local Total	.95	.96	.93
National 1	.89	.97	.82
National Total	.94	.96	.93

*Maximum and minimum values for D_b at .05 confidence level.

Table 3

Comparison of Subscribers and Nonsubscribers, Controlling for SES

Low SES

Problem Variable	D_s	D_n	z-value	probability
Local 1	.88	.86	.357	.36
Local Total	.89	.89	.094	.46
National 1	.80	.90	1.736	.04
National Total	.91	.92	.823	.21

High SES

Problem Variable	D_s	D_n	z-value	probability
Local 1	.84	.72	1.868	.04
Local Total	.91	.81	2.660	.004
National 1	.65	.84	2.383	.01
National Total	.82	.87	1.036	.15

Table 4
Comparison of SES levels,
Controlling for Cable Subscription

Subscribers

Problem Variable	D_l	D_h	z-value	probability
Local 1	.88	.84	1.230	.11
Local Total	.89	.91	-1.062	.15
National 1	.80	.65	-1.678	.05
National Total	.91	.82	-1.673	.05

Nonsubscribers

Problem Variable	D_l	D_h	z-value	probability
Local 1	.86	.72	1.953	.03
Local Total	.89	.81	2.000	.02
National 1	.90	.84	1.295	.10
National Total	.92	.87	.842	.20

Table 5

Nonsubscribers' and Low SES Subscribers' Diversity Levels

Problem Variable	D_s*	D_n*	z-value	probability
Local 1	.90	.88	-.884	.19
Local Total	.92	.89	-.567	.29
National 1	.90	.80	-1.655	.05
National Total	.94	.91	-1.376	.09

*D_s indicates diversity level for subscribers, D_n indicates diversity level for nonsubscribers.